



Problem Resolution Report

NG/CoSD-043

Provisions for Documentum Labor Rates

Date: May 18, 2009

Summary:

In accordance with the provisions of the IT and Telecommunications Service Agreement dated January 24, 2006 ("the Agreement") by and between the County of San Diego ("County") and Northrop Grumman Information Technology, Inc. ("Northrop Grumman" or "Contractor") (hereinafter collectively referred to as "the Parties") agreement is reached on the date shown above

Issue or Problem:

Market demand for digital document management skills in general and Documentum expertise in particular has increased over the recent years to the point where such skills and expertise are not available to Northrop Grumman within the rate structure of our contract. An alternative source for the County for such expertise is EMC/ Documentum itself but EMC/Documentum charges the County up to \$225 per hour for such skills.

Proposed Solution:

Temporary Document Management Applications Services Rates

Northrop Grumman proposes adding two new temporary Document Management Applications Services rates to the contract, to be filled with supplier resources from vendors to Northrop Grumman. These rates will be temporary for a period not to exceed eighteen months, commencing with the initial charging of the temporary rates by NG or two months after the signing of this PRR whichever occurs first. This agreement will be reviewed every 6 months to determine the effectiveness of the temporary rates and this PRR. At the end of the temporary rate period, Northrop Grumman will be in a position to provide Documentum expertise thereafter at the current rate in the contract, \$114 per hour. This approach will require a waiver of some of the qualifications requirements for the labor categories involved as detailed below.

The two new Document Management Applications rates are as follows:

Documentum Architect at \$185 per hour, and
Documentum Developer at \$165 per hour

The category descriptions and qualifications for these two labor categories are as shown in Attachment 1 to this PRR-043.

New Employee Shadowing Process and Rate Structure

During the 18 month effective period for the Document Management Application rates, Northrop Grumman will engage in a program of actively recruiting recent college graduates and assign these employees to shadow the suppliers performing under the new Document Management Application categories/rates. The purpose of such shadowing will be to provide an accelerated training environment for such employees to enable them to eventually assume the duties of the suppliers performing under the temporary rates. Northrop Grumman proposes that such employees in this accelerated training regimen be provided at Northrop Grumman's expense for the first three month of their participation in the training regimen.



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Starting the fourth month such employees will be billable to the County through an approved County Documentum Work Request, at the lowest rate in the contract, \$85/hour for an Applications Developer. The qualifications for the Applications Developer category apply as set forth in the Agreement with the exception that instead of the experience requirements set forth in the Agreement, the new employee must have either been in Documentum training or shadowed a qualified developer or architect covered by the new Document Management Applications rate for (3) months to qualify for the \$85/hour rate.

After an additional six months (starting the tenth month of an employee's participation in the training regimen) these employees will be billable at the next rate of \$104/hour for a Senior Applications Developer through an approved County Documentum Work Request. These employees will remain at the \$104/hour rate through the completion of their 18 month training period.

The timing for periods of applicable rates will be applied to each employee based on the individual employee's training regimen start date. For an employee who has not completed the cycle of nine months (i.e., is eligible for the \$104 per hour rate) by the end of the eighteen month period, the employee can complete the cycle as described above – however, no new employees will be hired under this program after eighteen months unless the program period is extended in writing by the County. Northrop Grumman will maintain an up-to-date list of employees in this program (with the employee's start date) and make this list available upon County request.

The following table outlines the new employee pay scale under this PRR:

Start Month	End Month	Rate per hour
1	3	No Cost
4	9	\$85
10	18	\$104
19	+	\$114

The rates will be temporary. After the temporary period, Northrop Grumman will have a stable of qualified Documentum expertise available to the County at the original rate of \$114 per hour. NG will apply the retention practices that have been in effect and have had positive results for other specialist teams, e.g. Oracle DBAs. In the meantime, Northrop Grumman will be able to provide Documentum expertise to the County at a significant saving compared to what the County has paid to EMC/Documentum.

The resolution of the issue or Problem as described in this Problem Resolution Report shall govern the Parties' actions under the Agreement until a formal amendment of the Agreement is implemented in accordance with the terms of the Agreement, at which time this Problem Resolution Report shall be deemed superseded and shall be null and void.

All other terms and conditions of the Agreement remain unchanged and the Parties agree that such terms and conditions set forth in the Agreement shall continue to apply. Unless otherwise indicated, the terms used herein shall have the same meaning as those given in the Agreement.



Problem Resolution Report

NORTHROP GRUMMAN

NG/CoSD-043

Provisions for Documentum Labor Rates

IN WITNESS WHEREOF, THE Parties hereto, intending to be legally bound, have executed by their authorized representatives and delivered this Problem Resolution Report as of the date first written above.

COUNTY OF SAN DIEGO

**NORTHROP GRUMMAN INFORMATION
TECHNOLOGY, INC.**

By: Bruce R. Petrozza

Name: Bruce Petrozza

Title: Manager

J. M. HULSON

By: _____

Name: Randolph Pabst

Title: Sr. Contracts Manager

EXHIBIT 16.1-4 — APPLICATION SERVICES LABOR CATEGORIES

1. PROGRAM MANAGER

Description: A Program Manager is responsible for the most complex projects. Complex projects are defined:

- Labor Costs greater than \$1,000,000 (excluding license or hardware costs) or
- Projects so designated by the GITM

This classification manages both internal and external project teams and interacts with County executives, County department heads, various County staff, and individuals of similar status from County vendors. This classification must have the ability to establish and maintain cooperative working relationships; use interdisciplinary teams effectively in the conduct of the project; speak effectively before large groups; reason logically and creatively and use a variety of analytical and research techniques to solve complex problems; be proficient in the use of cost and schedule tools; analyze situations and propose an effective course of action; analyze data; identify the need for and provide creative thinking related to complex problems, develop and evaluate alternatives; write thorough, credible, well-documented reports; work within tight deadlines. The Program Manager has full responsibility for the project, budget, schedule, project tasks and deliverables and may be the lead to the County vendors.

Experience: This classification must have a minimum of eight (8) years of broad and extensive project experience. At least four (4) years of that experience must have been in a lead capacity.

Education: This classification requires (1) the possession of (i) a baccalaureate or equivalent university degree and a minimum of 4,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes within the last six (6) years, (ii) an associates degree and a minimum of 6,000 hours of project management experience within initiating, planning, executing, controlling, or closing processes, or (iii) a high school diploma or equivalent secondary school credential and a minimum of 7,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes; and (2) PMP certification or contractor equivalent.

Work Products: Examples of work products include: Project Plan, Project Proposal, Statement of Work, Project Status Report, Client Program Review template, CTO review template, and Lesson Learned Document.

2. PROJECT MANAGER

Description: This classification manages both internal and external project teams and interacts with County executives, County department heads, various County staff, and individuals of similar status from a County vendor. This classification must have the ability to establish and maintain cooperative working relationships; use interdisciplinary teams effectively in the conduct of the project; speak effectively before large groups; reason logically and creatively and use a variety of analytical and research techniques to solve

complex problems; be proficient in the use of cost and schedule tools; analyze situations and propose an effective course of action; analyze data; identify the need for and provide creative thinking related to complex problems, develop and evaluate alternatives; write thorough, credible, well-documented reports; work within tight deadlines. The Project Manager has full responsibility for the project, budget, schedule, project tasks and deliverables and may be the lead to the County vendor.

Experience: This classification must have a minimum of five (5) years of broad and extensive project experience. At least two (2) years of that experience must have been in a lead capacity.

Education: This classification requires (1) the possession of (i) a baccalaureate or equivalent university degree and a minimum of 4,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes within the last six (6) years, (ii) an associates degree and a minimum of 6,000 hours of project management experience within initiating, planning, executing, controlling, or closing processes, or (iii) a high school diploma or equivalent secondary school credential and a minimum of 7,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes; and (2) PMP certification or contractors equivalent.

Work Products: Examples of work products include: Project Plan, Project Proposal, Statement of Work, Project Status Report, Client Program Review template, CTO review template, and Lesson Learned Document.

3. SYSTEMS ANALYST

Description: A Systems Analyst performs the elicitation, documentation, and analysis of requirements for the development, installation, implementation, procurement, or support of custom developed systems or third party developed systems. This classification must be able to analyze data and business processes, identify and solve problems, reason logically and draw valid conclusions; apply creative thinking in the design of methods of processing data; establish and maintain effective working relationships with others; communicate effectively verbally and in writing. The Systems Analyst will have general domain understanding of the overall County business and the specific department function.

Specific activities performed will include:

- Participates as an active participant in work groups and work sessions with business and technical representatives;
- Assists clients in articulating and defining their business requirements;
- Provide documentation of the business requirements;
- Utilizes experience in development methodologies, documentation and industry standards to define and develop business requirements and functional specifications; and
- Perform Business Risk Assessment analysis and support Project Manager in determining Project Risk and Risk Mitigation.

Experience: This classification must have a minimum of six (6) years experience in working on software application development projects. At least three (3) years of that experience must have been associated with application requirements management.

Education: This classification requires the possession of a (1) baccalaureate or equivalent university degree in management information systems, (2) associates degree with two (2) additional years experience in software development, or (3) high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Requirements Document, Project Proposal, Requirements Traceability matrix, and Risk Management Plan.

4. SENIOR APPLICATION DEVELOPER

Description: A Senior Application Developer acts in a lead capacity on the most complex applications, and/or on the most complex data processing problems and can work independently.

A Senior Applications Developer has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of eight (8) years experience in working on software development projects.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

5. APPLICATION DEVELOPER

Description: An Application Developer acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. An Application Programmer has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and

its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of 3.5 years experience in working on software development projects. At least two (2) years of that experience must be in a single language unless technology precludes it.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

6. APPLICATION DEVELOPER—ADVANCED TECHNOLOGY

Description: An Application Developer—Advanced Technology acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. This classification must have the minimum technical experience described in Table 2, or the then current version of Table 2 as updated annually by mutual agreement of County and Contractor. An Application Developer—Advanced Technology has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of five (5) years experience in working on software development projects. At least four (4) years of that experience must be in a single language, development environment, or ERP application functionality identified in Table 2.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

Table 2 Technical Experience (minimum 1 technology)

ORACLE DEVELOPER SUITE	PEOPLETOOLS	ERP (I.E., ORACLE OR PEOPLESOFT) APPLICATION FUNCTIONALITY
C#.NET	J2EE/JAVA	

7. WEB DESIGNER

Description: A Web Designer acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. A Web Designer designs and builds web sites using a variety of graphics software applications, techniques, and tools. Designs and develops user interface features, site animation, graphics, and special effects elements. Contributes to the design efforts to enhance the look and feel of the organization's on-line offerings and is considered proficient in graphic design elements and the presentation of content. Designs the website to support the organization's strategies and goals relative to web communications. Requires understanding of web-based technologies and thorough knowledge of HTML, Photoshop, Illustrator, and/or other design related applications.

Experience: This classification must have a minimum of two (2) years experience in working on software development projects. At least one (1) year of that experience must be in web design.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associated degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, Graphics, and Animation.

8. APPLICATION ARCHITECT

Description: An Application Architect provides technical direction to projects/tasks and is responsible for end-to-end system design. The Application Architect develops, communicates, maintains, and enforces the overall architecture of the information system-applications, data, and technical infrastructure. The system architect knows what the system pieces are and how they fit together. The Application Architect:

- Has a thorough understanding of business process design techniques and participates in the high-level business process design;
- Is a master of application architecture and leads the application architecture definition;
- Has a thorough understanding of entity modeling and participates actively in high-level entity modeling activities;
- Has a thorough understanding of platform architectures and network architectures (sizes hardware, determines platforms);
- Assess performance, tuning and capacity requirements to determine key technology decisions;
- Is responsible for the interrelated architectures of the computer system, that is, the integrity of design, communications, interfaces between application subsystems, and supporting databases;
- Oversees the activities of the Database Administrator and the Software Configuration Analyst;
- Has primary responsibility for all aspects of Architectural Engineering;
- Thoroughly understands testing and participates in the broader levels of test planning; and
- Ensures effective SCM across applications.

Experience: This classification must have a minimum of seven (7) years experience working on software development projects. At least three (3) years of that experience must be in end-to-end system design, modeling, and tuning.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree or certificate in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Conceptual Architecture Diagram, Interface Design Document, System Architecture Study, Vendor Requirements Questionnaire, and Engineering Documents.

9. DATABASE ADMINISTRATOR

Description: A Database Administrator configures the Database Management System (DBMS) software, installs and configures the application database, defines file organization and indexing methods, and implements security procedures for specific user applications. The Database Administrator provides technical knowledge/expertise in the use of the DBMSs and provides table structure design, backup/restore/recovery processes and procedures, performance analysis and tuning, datafile sizing, upgrade/patch support, allocating storage, table space allocation, user account management, and may generate SQL scripts against the production/test/development databases to verify data.

Experience: This classification must have a minimum of six (6) years experience working as a Database Administrator.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree or certificate in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Entity Relationship Diagram, and Data Backup Plan.

10. Documentum Architect

Description: A Documentum Architect provides technical direction to Documentum projects/tasks and is responsible for end-to-end Documentum system design. The Documentum Architect develops, communicates, maintains, and enforces the overall architecture of the Documentum system-applications, data, and technical infrastructure. The Documentum Architect:

- Has a thorough understanding of business process design techniques and participates in the high-level business process design;
- Is a master of Documentum architecture and leads the Documentum architecture definition;
- Has a thorough understanding of entity modeling and participates actively in high-level entity modeling activities;
- Has a thorough understanding of platform architectures and network architectures (sizes hardware, determines platforms);
- Assesses performance, tuning and capacity requirements to determine key technology decisions;
- Is responsible for the interrelated architectures of the Documentum system, that is, the integrity of design, communications, interfaces between application subsystems, and supporting databases;
- Oversees the activities of the Database Administrator and the Software Configuration Analyst;
- Thoroughly understands testing and participates in the broader levels of test planning; and

Experience: This classification must have a minimum of seven (7) years experience working on Documentum development projects. At least three (3) years of that experience must be in end-to-end system design, modeling, and tuning.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree or certificate in management information systems or computer science, (2) an associates degree with two (2) additional years experience in Documentum development, or (3) a high school diploma with four (4) additional years experience in Documentum development.

Work Products: Examples of work products include: Conceptual Architecture Diagram, Interface Design Document, System Architecture Study, Vendor Requirements Questionnaire, and Engineering Documents.

11. Documentum Developer

Description: A Documentum Developer acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. A Documentum Developer has experience in Documentum systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; content management, and statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of three (3) years experience working in Documentum software development on projects of equal or greater complexity than the County's and over five (5) years of general software development experience.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Software Detailed Design document, Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

END OF SCHEDULE